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PRINCIPAL INVESTIGATOR: Max Weil

CONTRACTING ORGANIZATION: The Institute of Critical Care Medicine
Palm Springs, California 92262

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Max Weil

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

The Institute of Critical Care Medicine
Palm Springs, California 92262

E-Mail: weilm@aol.com

8. PERFORMING ORGANIZATION
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U.S. Army Medical Research and Materiel Command
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13. Abstract (Maximum 200 Words) (abstract should contain no proprietary or confidential information)

The Sixth Wolf-Creek Conference was held at the Ritz Carlton Hotel in Rancho Mirage from June 4, 2001 to June 7, 2001. Approximately 70 internationally renowned experts on Cardiopulmonary Resuscitation attended the Conference and presented their most recent research findings. Four Army Medical officers attended and observed the Conference. The experts specifically focused on issues of optimizing waveforms and emergencies for defibrillation, mechanical options for improving blood flow during cardiac arrest, more optimal vasopressor interventions during CPR, myocardial and cerebral preservation during CPR, and outcome measurements. The proceedings of the Conference will be published in a *Supplement of the Journal of Critical Care Medicine*.

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The Sixth

Wolf Creek Conference on

Cardiopulmonary Resuscitation

*June 4 – June 7, 2001
Ritz Carlton Hotel
Rancho Mirage, California*

*The Wolf Creek Conference
On
Cardiopulmonary Resuscitation*

The so-called Wolf Creek Conferences of CPR researchers were initiated by Doctors James Elam, James Jude, and Peter Safar. The objective was to improve the clinical practices of cardiopulmonary resuscitation by stimulating laboratory and clinical research. There was great need of objective data such that guidelines on resuscitation might be secure. The first meeting of some 10 investigators was hosted in 1975 by Dr. James Jude at his "Wolf Creek Lodge" in Georgia. The proceedings were published by Doctors Safar and Elam as part of a monograph entitled *Advances in CPR* by Springer-Verlag in 1977. The second meeting occurred approximately five years later. It was chaired by the late Dr. Joseph Redding. The proceedings appeared in *Critical Care Medicine* in 1981. The third was held approximately five years later and it was organized by Doctors Nicholas Bircher, Mickey Eisenberg and Charles Otto. The Fourth Wolf Creek Conference was held in Palm Springs, California in September 1996 convened by The Institute of Critical Care Medicine under the chairmanship of Dr. Max Harry Weil. The proceedings were published in *New Horizon*. The Fifth Conference was in Rancho Mirage, in June 1998 at the Ritz Carlton Hotel. The proceedings were published as a Supplement to *Critical Care Medicine*.

This will be the sixth of these expert conferences. The initial objective of these conferences was at least partially accomplished, and the field of resuscitation science has grown impressively. New capabilities for cardiac resuscitation with newer waveform automated external defibrillators greatly expanded capabilities for defibrillation. A number of new mechanical compression-decompression methodologies have emerged. The futility of the pulse check, the limitations of currently used vasopressor agents and anti-arrhythmic drugs, and the decreased emphasis on ventilation in settings of dysrhythmic cardiac arrest have been demonstrated. Increasingly larger emphasis on resuscitation research has prompted more vigorous clinical, laboratory, and bioengineering research more recently sparked by the impetus of the PULSE Consortium. It is, therefore, timely that another Wolf Creek Conference be held for exchanges between active research workers on CPR. Once again, we anticipate publication of the proceedings as a Supplement to *Critical Care Medicine*.

WOLF CREEK VI

Monday, June 4, 2001

6:30 PM

Informal Dinner on Arrival

Tuesday, June 5, 2001

7:00 – 7:45 A.M.

Breakfast

7:45 – 7:55 A.M.

MH Weil and W Tang
Welcome and Introduction

SESSION 1

DEFIBRILLATION

8:00 – 8:10 A.M.

R. Kerber
Beyond Biphasic Defibrillation Waveforms

8:15 – 8:25 A.M.

R. Ideker
Efficacy of Defibrillation for Spontaneous and
Electrically Induced VF

8:30 – 8:40 A.M.

H. Halperin
Defibrillation After Prolonged Cardiac Arrest

8:45 – 8:55 A.M.

J. Jones/O. Tovar
Electromechanical Deterioration of Ventricular
Function During VF

9:00 – 9:10 A.M. **D. Jorgenson**
Adapting Current AEDs for CPR on Children and Infants

9:15 – 9:25 A.M. **W. Tang**
Pharmacological Defibrillation

9:30 – 9:40 A.M. **F. Sterz**
Recurrent Cardiac Arrest in 360 Survivors

9:45 – 10:15 A.M. **Coffee Break**

10:15 – 10:25 A.M. **G. Nichol**
Cost-Effectiveness of Early Defibrillation by Non-Traditional Responders to Out-of-Hospital Cardiac Arrest

10:30 – 10:40 A.M. **J. Stothert**
Prehospital Cardiac Arrest and The Low Energy Rectilinear Biphasic Waveform

10:45 A.M. – 12:15 P.M. PANEL I

OPTIMIZING WAVEFORMS AND ENERGIES FOR DEFIBRILLATION

R. White, R. Kerber (Moderators)
G. Bardy, R. Idcker, J. Jones, C. Morgan, D. Snyder, and O. Tovar.

12:15 – 1:30 P.M. **Lunch**

SESSION 2 MECHANICAL INTERVENTIONS

1:30– 1:40 P.M. **R. Berg**
Adverse Effects of Interrupting Chest Compression

- 1:45 – 1:55 P.M.** **J. Bisera**
A Protective Device For Uninterrupted
Precordial Compression
- 2:00 – 2:10 P.M.** **K. Kern**
Optimizing Compression/Ventilation Ratios.
- 2:15 – 2:25 P.M.** **MH Weil**
Expanding AEDs to Include Automated Detection of
Cardiac, Respiratory, or Cardiorespiratory Arrest
- 2:30 – 2:40 P.M.** **K. Lurie**
The Critical Role of Ventricular Preload
During CPR
- 2:45 – 2:55 P.M.** **V. Nadkarni**
Liquid Ventilation in a Pediatric Model
- 3:00 – 3:10 P.M.** **C. Young**
A Portable Device for Uninterrupted
Chest Compression
- 3:10 – 3:40 P.M.** **Break**
- 3:40 – 5:10 P.M.** **PANEL II**

MECHANICAL OPTIONS FOR IMPROVING BLOOD FLOW

G. Ewy, H. Halperin (Moderators)
R. Berg, J. Bisera, K. Kern, K. Lurie, and V. Nadkarni

5:10 P.M. **Dinner**

7:00 – 8:30PM

PANEL III

**OPTIMIZING AIRWAY MANAGEMENT AND
MECHANICAL VENTILATION DURING CPR**

P. Safar, R. Berg (Moderators)

L. Becker, N. Chandra-Strobos, A. Idris, K. Kern, and N. Paradis

Wednesday, June 6, 2001

7:00 – 8:00 A.M.

Breakfast

SESSION 3:

**PHARMACOLOGICAL
INTERVENTIONS**

8:00 – 8:10 A.M.

N. Paradis

Revisiting High-Dose Epinephrine for the
Management of Human Cardiac Arrest

8:15 – 8:25 A.M.

W. Tang

Selective α_2 Adrenergic Vasopressor Agents
for CPR

8:30 – 8:40 A.M.

V. Wenzel

Observations on the Effects of Vasopressin in Human
Victims of Cardiac Arrest

8:45 – 8:55 A.M.

R. Svedjeholm

Role of Intravenous Glutamate for CPR

9:00 – 9:30 A.M.

Break

9:30 – 11:00 A.M. PANEL IV

**MORE OPTIMAL VASOPRESSOR INTERVENTIONS
DURING CPR**

G. Ewy, C. Otto. (Moderators)
V. Nadkarni, J. Niemann, N. Paradis, W. Tang, and V. Wenzel.

11:00 – 11:45 A.M. FREE DISCUSSION
MH Weil and W. Tang (Moderators)

11:45 A.M. – 1:15 P.M Lunch

**SESSION 4: MYOCARDIAL
PRESERVATION**

1:15 – 1:25 P.M. W. Tang
Myocardial Hibernation During CPR

1:30 – 1:40 P.M. R. Gazmuri
Sodium Hydrogen Exchange Inhibitor for
Minimizing Post-Resuscitation Myocardial
Dysfunction

1:45 – 1:55 P.M. A. Idris
Oxidant Injury After Cardiac Arrest and
Reperfusion

2:00 – 2:10 P.M. L. Becker
Inducing Hypothermia: Cellular Rationale and
Potential Clinical Method

2:15 – 2:25 P.M. T. Vanden Hoek
Post-Resuscitation Oxidant Injury in
Cardiomyocytes due to RAC1 NADH Oxidase

2:30 – 3:00 P.M. Break

3:00 – 4:30 P.M. PANEL V

**MECHANISMS AND MANAGEMENT OF POST-
RESUSCITATION MYOCARDIAL DYSFUNCTION**

G. Sopko, M.H. Weil (Moderators)
L. Becker, N. Chandra-Strobos, R. Gazmuri, H. Halperin, K. Kern, and
W. Tang

SESSION 5 CEREBRAL RESUSCITATION

4:30 – 4:40 P.M. W. Behringer/P. Safar
Hypothermia for Cerebral Preservation
During CPR

4:45 – 4:55 P.M. B. Böttiger
Effects of Inhibition of Caspases on Neuronal
Degeneration

5:00 – 6:30 P.M. PANEL VI

CEREBRAL RESUSCITATION

P. Safar, S. Tisherman (Moderators)
W. Behringer, N. Bircher, B. Böttiger, G. Ling, and F. Sterz

6:30 – 8:00 P.M. Dinner

8:00 – 9:30 P.M. PANEL VII

**ANTI-ARRHYTHMIC DRUGS FOR
FACILITATING CPR**

N. Chandra-Strobos, V. Nadkarni (Moderator)
T. Auferderheide, P. Ding, R. Gazmuri, J. Ornato, and R. Svedjeholm

Thursday, June 7, 2001

7:15 – 8:15 A.M. **Breakfast**

SESSION 6: OUTCOME MEASUREMENTS

8:15 – 8:25 A.M. **A. Hallstrom**
Should Time to Call Be Used in Assessing Time
Gradients of Out-of-Hospital Cardiac Arrest?

8:30 – 8:40 A.M. **PY Ding**
In-Hospital Resuscitation: The Taipei Experience

8:45 – 8:55 A.M. **P. Pepe/J. Wigginton**
Gender-Related Differences in the Presentation
and Outcomes in Out-of-Hospital Cardiac Arrest

9:00 – 9:10 A.M. **S. Stratton/J. Niemann**
Impact of DNR on Survival to Discharge

9:15 – 9:25 A.M. **T. Aufderheide**
Asystolic Unwitnessed Out-of-Hospital Cardiac
Arrest As a Criterion for Waiving Resuscitation

9:30 – 9:40 A.M. **C. Babbs**
Meta-Analysis of Studies on CPR

9:45 – 10:15 A.M. **Break**

10:15 – 11:45 A.M. **PANEL VIII**

OUTCOME MEASUREMENTS

G. Nichol. (Moderator)
T. Aufderheide, C. Babbs, PY Ding, N. Chandra-Strobos, A. Idris, and
G. Sopko

11:45 A.M. – 1:15 P.M. **Lunch**

11:45 A.M. – 1:15 P.M. Lunch

1:15 – 2:45 P.M. PANEL IX

CRITERIA FOR DISCONTINUING CPR EFFORTS

N. Chandra-Strobos, P. Safar (Moderators)
R. Gazmuri, G. Nichols, J. Niemann, N. Paradis.

2:45 – 3:15 P.M. Break

3:15 – 4:45 P.M. PANEL X

**CONFIRMING CARDIAC ARREST IN REAL-TIME:
MONITORING/MEASURING THE
EFFECTIVENESS OF CPR**

G. Ewy, MH. Weil (Moderators)
B. Berg, K. Kern, V. Nadkarni, N. Paradis, C. Otto, and W. Tang

5:00 PM ADJOURNMENT OF WOLF CREEK VI

WOLF CREEK CONFERENCE VI
Participants and Presenters

James I. Atkins, MD, PhD
Colonel, Medical Corps, USA
Walter Reed Army Institute of Research
Director, Division of Military Casualty Research

Tom P. Aufderheide, MD
Department of Emergency Medicine
Froedtert Hospital East
Milwaukee, Wisconsin

Charles F. Babbs, MD, PhD
Associate Research Scholar
Basic Medical Sciences
Purdue University

Gust Bardy, MD
Professor of Medicine
University of Washington

Lance Becker, MD
Director
Emergency Resuscitation Research Center
University of Chicago

Wilhelm Behringer, MD
Research Fellow
Safar Center for Resuscitation Research
University of Pittsburgh

Robert Berg, MD
Professor of Pediatrics
University of Arizona
Health Sciences Center

Nicholas Bircher, MD
Associate Director
Safar Center for Resuscitation Research
University of Pittsburgh

Joe Bisera, MSEE
Professor and Vice President, Bioengineering
Institute of Critical Care Medicine

Bernd W. Böttiger, MD, DEAA
Associate Professor of Anesthesiology
Coordinator of the Working Group on
Clinical and Experimental Resuscitation (ERC)
Department of Anesthesiology
University of Heidelberg
Heidelberg, Germany

James E. Brewer, MS
Director of Clinical Affairs
Zoll Medical Corporation

Nisha Chandra-Strobos, MD
Professor of Medicine
CCU Director
Johns Hopkins Bayview Medical Center
Johns Hopkins Medical Institutions

Wolfgang Dick, MD
Professor and Chairman
Department of Anesthesiology
Johannes Gutenberg University
Mainz, Germany

James Dillard
Director of Cardiovascular and
Respiratory Devices
U.S. Food and Drug Administration

Philip Yu-An Ding, MD, PhD
Professor and Chief of Cardiology
Taipei Veterans General Hospital
National Yang University
Taipei, Taiwan

Gordon Ewy, MD
Professor and Chief of Cardiology
Director
University of Arizona Sarver Heart Center
University of Arizona College of Medicine

Xun-mei Fan, MD
Beijing Children's Hospital
Beijing, China

Raul J. Gazmuri, MD, PhD
Director of ICU and CPR Laboratories
North Chicago VA Medical Center
Associate Professor, Department of Medicine
Assistant Professor
Department of Physiology
Finch University of Health Sciences
The Chicago Medical School

Frederick Geheb, MS, MSE, PhD
Director of Advanced Development
Zoll Medical Corporation

WOLF CREEK CONFERENCE VI
Participants and Presenters

Stacey Gehman
Research Engineer
Agilent Technologies
Heartstream Operation

Cleon Goodwin, MD
Colonel, U.S. Army
U.S. Army Institute of Surgical Research

H. Leon Greene, MD
Clinical Professor of Medicine
University of Washington

Al Hallstrom, PhD
Director PAD Coordinating Center
Professor of Biostatistics
University of Washington

Henry Halperin, MD, MA
Professor of Medicine
and Biomedical Engineering
Johns Hopkins University
School of Medicine

Ward M. Hamilton
Vice President, Marketing
Zoll Medical Corporation

Mary Fran Hazinski, RN, MSN
Vanderbilt University

M. Stephen Heilman, MD
Chairman and CEO
Lifeceor, Inc.

Raymond E. Ideker, MD, PhD
Jeanne V. Marks Professor Medicine
University of Alabama at Birmingham

Ahamed H. Idris, MD
Professor of Emergency Medicine,
Anesthesiology and Medicine
University of Florida
College of Medicine

Janice Jones, MD
Professor of Physiology and Biophysics
Georgetown University

Dawn B. Jorgenson, PhD
Senior Research Engineer
Agilent Technologies
Heartstream Operation

Richard Kerber, MD
Professor of Medicine
Department of Internal Medicine
University of Iowa

Karl B. Kern, MD
Professor of Medicine
University of Arizona

Tore Laerdal
Chairman
Laerdal Medical Corporation

Geoffrey S.F. Ling, MD, PhD
Lieut. Col, US Army
Associate Professor and Vice-Chair, Neurology
Director, Division of Critical Care,
Anesthesiology, and Surgery
Uniformed Services
University of Health Sciences

James E. Love
Battalion Chief
EMS Bureau
Omaha Fire Department

Keith Lurie, MD
Associate Professor of Medicine
University of Minnesota
Founder, CPRx

Tom Lyster
Research Engineer
Agilent Technologies
Heartstream Operation

Ken Morallec, PhD
Laerdal Medical Corporation

Carl Morgan, MSEE, PE
Research and Development
Agilent Technologies
Heartstream Operation

WOLF CREEK CONFERENCE VI
Participants and Presenters

Helge Mykdebust

Senior Research and Development Engineer
Laerdal Medical Corporation

Vinay Nadkarni, MD

Director, Pediatric Intensive Care
A.I. duPont Hospital for Children

Graham Nichol, MD, MPH

Associate Professor
Clinical Epidemiology
University of Ottawa
Ottawa, Canada

James Niemann, MD

Professor of Medicine
University of California, Los Angeles
Harbor-UCLA Medical Center

Charles Otto, MD

Professor of Anesthesiology and Medicine
University of Arizona

Richard Packer

Chairman and CEO
Zoll Medical Corporation

Norman A. Paradis, MD

Assistant Professor of Medicine
Columbia Presbyterian Medical Center

Michael Parascandola, MS, MSE, PhD

Director of Marketing, Hospitals
Zoll Medical Corporation

Paul Pepe, MD, MPH

Professor and Chair, Emergency Medicine
University of Texas
Southwestern Medical Center
and Parkland Memorial Hospital
Medical Director, Dallas EMS System

Barbara Riegel, DNSc, RN, CS, FAAN

Professor, School of Nursing
San Diego State University

James K. Russell, PhD

Scientist
Agilent Technologies
Heartstream Operation

Peter Safar, MD

Distinguished Professor of
Resuscitation Medicine
Safar Center for Resuscitation Research
University of Pittsburgh

David E. Snyder

Research Director
Agilent Technologies
Heartstream Operation

George Sopko, MD, MPH

Cardiologist
National Heart, Lung, and Blood Institute
National Institutes of Health

Fritz Sterz, MD

University Professor
University of Vienna
Vienna, Austria

Joseph Stothert, MD, PhD

Medical Director
Omaha Fire Department

Samuel J. Stratton, MD, MPH

Vice Chair, Department of Emergency
Medicine
Harbor-UCLA Medical Center
Medical Director
Los Angeles County EMS Agency

Rolf Svedjeholm, MD, PhD

Department of Cardiothoracic Surgery
Linköping Heart Center University Hospital
Linköping, Sweden

Wanchun Tang, MD

Professor and Vice President of Research
Institute of Critical Care Medicine

Oscar Tovar, MD

Associate Professor of
Physiology and Biophysics
Georgetown University

Terry Vanden Hoek, MD

Assistant Professor
Emergency Medicine
University of Chicago

WOLF CREEK CONFERENCE VI
Participants and Presenters

Robert G. Walker
Research Scientist
Medtronic Physio-Control

Max Harry Weil, MD, PhD
Distinguished University Professor
President
Institute of Critical Care Medicine

Volker Wenzel, MD
Leopold-Franzens
University of Innsbruck
Department of Anesthesiology
and Critical Care Medicine
Innsbruck, Austria

Jane G. Wiggington, MD
Assistant Professor, Emergency Medicine
University of Texas
Southwestern Medical Center
and Parkland Memorial Hospital
Assistant Medical Director
Dallas EMS System

Roger White, MD
Professor of Anesthesiology
Mayo Clinic
Rochester, Minnesota

Alberto Solá, MD
Medical Director
Ameri-Med Hospitals
México City, México

Lars Wik, MD, PhD
Norwegian Competence Center for
Emergency Medicine
Ullevaal University Hospital
Oslo, Norway

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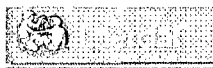
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1695 North Sunrise Way, Building #3
Palm Springs, CA 92262

Phone: (760) 323-6867
Fax: (760) 323-6167
Website: www.911research.org



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68-900 Frank Sinatra Dr. • Rancho Mirage, California 92270 • United States
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